

AUS920030436US1

MAY 31 2006

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:  
 Hung The Dinh, Mansoor A. Lakhdir, and  
 Phong Anh Pham

§ Group Art Unit: 2176

§

§

§

Serial No.: 10/631,057

§ Examiner: Tran, Quoc A.

§

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Filed: July 31, 2003

§ Atty Docket No.: AUS920030436US1

§

§

Title: Image Distribution in Data  
Processing Systems

§ CUSTOMER No.: 34533

§

§

Mail Stop: Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

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 USPTO at 571-273-8300 or deposited with the United States Postal Service  
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 Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this  
 date:

May 31, 2006  
 Date  
Catherine Berglund  
 Catherine Berglund

**DECLARATION OF PRIOR INVENTION IN THE UNITED STATES  
OR IN A NAFTA OR WTO MEMBER COUNTRY  
TO OVERCOME CITED PATENT OR PUBLICATION (37 C.F.R. § 1.131)**

**PURPOSE OF DECLARATION**

1. This declaration is to establish completion of the invention of this application in the United States at a date prior to December 9, 2004, which is the effective date of the U.S. Patent Application Publication that was cited by the Examiner. The U.S. Patent Application Publication that was cited by the Examiner is Conning U.S. Pub. No. 2004/0250205 A1.
2. The persons making this declaration are the inventors.

**FACTS AND DOCUMENTARY EVIDENCE**

3. To establish the date of completion of the invention of this application, the following attached document is submitted as evidence: International Business Machine Corporation's internal invention disclosure document, Disclosure Number AUS8-2002-0513, created by inventor Hung The Dinh on April 22, 2002 and last modified on May 6, 2003. From this disclosure document, it can be seen that the invention in this application was made at least by May 6, 2003, which is the effective date of the reference.

Mike

512-795-8414

p.3

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AUS920030436US1

MAY 31 2006  
DILIGENCE

4. The following facts establish the diligence of the applicants, from the time of their conception of the present invention, to a time just prior to the date of the reference, up to the filing of this application:

- When the invention was conceived, all the inventors were employees of the International Business Machine Corporation ('IBM'). IBM is the assignee of the present invention. As shown by the attached IBM Disclosure, number AUS8-2002-0513, the inventors had a complete conception of the present invention by at least May 6, 2003, because the IBM Disclosure was last modified on May 6, 2003.
- The invention was assigned by IBM to outside patent counsel for preparation of a patent application on May 7, 2003.
- Between May 2003 and July 2003, outside patent counsel worked with the inventors to develop a patent application. The patent application for the invention was completed by outside patent counsel on July 16, 2003.
- IBM completed formal documents to accompany the application, obtained inventor signatures on the formal documents, and filed the application for this invention in the USPTO on July 31, 2003.

All these steps were taken in the ordinary course of patenting as typically practiced by IBM, IBM's employees, and IBM's outside patent counsel with no undue delay.

**TIME OF PRESENTATION OF THE DECLARATION**

5. This declaration is submitted after final rejection.

**DECLARATION**

6. As a person signing below:

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Mike

512-795-8414

p. 4

AUS920030436US1

## INVENTORS' SIGNATURES

Hung The Dinh

Inventor's signature: \_\_\_\_\_ Date \_\_\_\_\_

Country of Citizenship: United States of America

Residence: Round Rock, Texas

Post Office Address: 3628 Hawk Ridge Street  
Round Rock, Texas 78664-1133

Mansoor A. Lakhdir

Inventor's signature: Mansoor A. Lakhdir Date 4/13/2006

Country of Citizenship: United States of America

Residence: Austin, Texas

Post Office Address: 6418 Yaupon Drive  
Austin, Texas 78759

Phong Anh Pham

Inventor's signature: \_\_\_\_\_ Date \_\_\_\_\_

Country of Citizenship: United States of America

Residence: Austin, Texas

Post Office Address: 12713 Tantara Drive  
Austin, Texas 78729

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## INVENTORS' SIGNATURES

Hung The Dinh

Inventor's signature: 

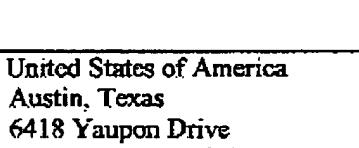
Date 4/17/06

Country of Citizenship: United States of America

Residence: Round Rock, Texas

Post Office Address: 3628 Hawk Ridge Street  
Round Rock, Texas 78664-1133

Mansoor A. Lakhdhir

Inventor's signature: 

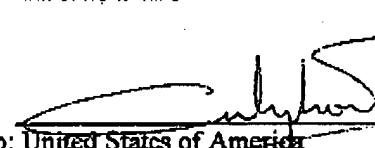
Date \_\_\_\_\_

Country of Citizenship: United States of America

Residence: Austin, Texas

Post Office Address: 6418 Yaupon Drive  
Austin, Texas 78759

Phong Anh Pham

Inventor's signature: 

Date 4/17/06

Country of Citizenship: United States of America

Residence: Austin, Texas

Post Office Address: 12713 Tantara Drive  
Austin, Texas 78729

**Disclosure AUS8-2002-0513**

Prepared for and/or by an IBM Attorney - IBM Confidential

Created By Hung Dinh On 04/22/2002 05:37:48 PM EDT  
Last Modified By Nancy Werchen On 05/06/2003 04:30:29 PM EDT

Required fields are marked with the asterisk (\*) and must be filled in to complete the form.

**\* Title of disclosure (in English)**

Method and apparatus to implement an &lt;IMGDB&gt; tag in HTML

**Summary**

Status	Final Decision	(File)
Final Deadline		
Final Deadline		
Reason		
Docket Family	AUS9-2003-0436	
*Processing Location	Austin	
*Functional Area	select (62) 52 - SDM - SOLUTION PROVIDERS MARKETING (R. C. Timpson)	
Attorney/Patent Professional	Diana L Roberts/Austin/IBM	
IDT Team	select Clifford Spinac/Austin/IBM Hung Dinh/Austin/IBM David Lee/Austin/IBM	
Submitted Date	04/22/2002 05:46:18 PM EDT	
*Owning Division	select DR	
Incentive Program		
Lab		
*Technology Code		
PVT Score		

**Inventors with a Blue Pages entry**

Inventors: Hung Dinh/Austin/IBM, Mansoor A Lakhdir/Austin/IBM, Phong Pham/Austin/IBM

Inventor Name	Inventory Serial	Div/Dept	Phone	Manager Name
> Dinh, Hung T.	644683	7N/0J3A	793-0254	Luk, Stephen S.
Lakhdir, Mansoor A.	599320	7N/XSXA	793-7742	Dunn, Eric
Pham, Phong A.	372977	7N/RWTA	793-0382	Haff, L.F. (India)

&gt; denotes primary contact

**Inventors without a Blue Pages entry****IDT Selection****\*Main Idea**

1. Describe your invention, stating the problem solved (if appropriate), and indicating the advantages of using the invention.

The limitation today of the HTML &lt;IMG&gt; tag is that the source GIF file can only

AUS8-2002-0513 Method and apparatus to implement an <IMGDB> tag in HTML - continued

be stored in a flat file system. It cannot be stored in a database. This makes the administration and management of all the GIF files difficult, especially when they scatter around in different file systems on different servers. Tracking updates to GIF files is cumbersome for a development team & at a minimum requires a library management system. Also, identifying and removing obsolete GIF files becomes an issue.

A number of web-sites use a three tier architecture, which is typically composed of a front-end web (HTTP) server, an application server in the middle, and a back-end database server. In this architecture, the web server is the most susceptible with the database server being the most secure. GIF files are typically stored on the file system of the web (HTTP) server, which is the server most vulnerable to a hacker attack. A malicious hacker can replace a GIF file on the web server, using the same filename, but a different graphic. When GIF files are stored in the database server, they can optionally be password protected. Thus the GIFs are more secure, and only the application server is able to connect to the database server and retrieve password protected GIFs from the secure back-end database server. For performance the database server can be placed on the same machine as the application server.

Typically a web-page will include a number of GIF files. To retrieve each GIF file, the client browser has to send a separate request to the server. So, for example to retrieve a web-page that has 12 GIFs on the page, the client will have to issue 13 separate requests to the server. One request for the web-page & 12 separate requests for each of the GIFs on the web-page. So to display just one page, these 13 separate requests/responses results in a lot of transactional traffic between client browser & the server, and is inefficient. With our idea, only one request would flow from client browser to the server. The application server would resolve & pull all the GIFs needed from the database server and serve them to the client. The client breaks up the images and caches them, and subsequent references are served from its local cache. With the use of database caching, the GIFs from the database server would be served quickly, resulting in a performance boost for subsequent client requests.

So, this invention solves the above problems by providing one instance of all the GIF files stored in a central repository. This can be implemented as a domain table in a relational database under the central control of a single DBA (Data Base Administrator). Then this list is simply referenced by HTML form/page developers who have a need to place this list on a web form/page.

2. How does the invention solve the problem or achieve an advantage, (a description of "the invention", including figures inline as appropriate)?

For example if you view the HTML source of the following URL,  
<http://www.developer.ibm.com>

```
<IMG SRC="http://t1d.developer.cacheibm.com/g/ibm/ra_blk2.gif" width="200"
height="150">
<IMG SRC="http://t1d.developer.cacheibm.com/g/ibm/ra_blk3.gif" width="200"
height="150"> <IMG SRC =
http://t1d.developer.cacheibm.com/g/ibm/ra_blk4.gif" width="200"
height="150">
```

AU68-2002-0513 Method and apparatus to implement an <IMGDB> tag in HTML - continued

Notice the repetitive use of the HTML <IMG> tag

The idea is to replace the hard coded repetitive tags, with the following concise HTML code:

The idea is to add another tag, <IMGDB>, before these <IMGID> tags to load all images in one transaction. For example,

```
<IMGDB  
SRC = http://www.developer.ibm.com/database.storedprocedure?image_group_id>  
</IMGDB>  
<IMGID>image_group_id.image_id.....<\IMGID>
```

The DB2 stored procedure will contain a set of query DB2 select statements to retrieve the GIFs. Note, here we use IBM DB2 as an example of a relational database, but our idea applies equally well to any modern relation database program product. This invention will simplify and reduce errors in the creation, maintenance, security, and performance of web-based HTML pages forms.

The method of this invention is as follows:

1. An <IMGDB> and </IMGDB> tag is created to point to the URL location (which points to the database server)
2. A DB2 stored procedure is created and registered on that DB2 server
3. All the GIF files are stored as BLOBs in DB2
4. Stored procedure will query and return the result list in GIF format
5. Browser will display the GIFs

3. If the same advantage or problem has been identified by others (inside/outside IBM), how have those others solved it and does your solution differ and why is it better?

We ran web and patent database searches. There is no application out there that has the features of our disclosure

4. If the invention is implemented in a product or prototype, include technical details, purpose, disclosure details to others and the date of that implementation.  
not implemented

**\*Critical Questions (Questions 1-9 must be answered in English)**

**\*Question 1**

On what date was the invention workable? 04/22/2002 Please format the date as MM/DD/YYYY  
(Workable means i.e. when you know that your design will solve the problem)

**\*Question 2**

Is there any planned or actual publication or disclosure of your invention to  No  
anyone outside IBM?

If yes, Enter the name of each publication or patent and the date published below.

Publication/Patent:

Date Published or Issued:

Are you aware of any publications, products or patents that relate to this invention?

AUS8-2002-0513 Method and apparatus to implement an &lt;IMGDB&gt; tag in HTML - continued

Yes  
 No

If yes, Enter the name of each publication or patent and the date published below.

Publication/Patent:

Date Published or Issued:

**\*Question 3**

Has the subject matter of the invention or a product incorporating the invention been sold, used internally in manufacturing, announced for sale, or included in a proposal?

Yes  
 No

Is a sale, use in manufacturing, product announcement, or proposal planned?

Yes  
 No

If Yes, Identify the product if known and indicate the date or planned date of sale, announcements, or proposal and to whom the sale, announcement or proposal has been or will be made.

Product:

Version/Release:

Code Name:

Date:

To Whom:

If more than one, use cut and paste and append as necessary in the field provided.

**\*Question 4**

Was the subject matter of your invention or a product incorporating your invention used in public, e.g., outside IBM or in the presence of non-IBMer?

Yes  
 No

If yes, give a date. Please format the date as MM/DD/YYYY

**\*Question 5**

Have you ever discussed your invention with others not employed at IBM?

Yes  
 No

If yes, identify individuals and date discussed. Fill in the text area with the following information, the names of the individuals, the employer, date discussed, under CDA, and CDA #.

**\*Question 6**

Was the invention, in any way, started or developed under a government contract or project?

Yes  
 No  
 Not sure

If Yes, enter the contract number

**\*Question 7**

Was the invention made in the course of any alliance, joint development or other contract activities?

Yes  
 No  
 Not Sure

If Yes, enter the following:

Name of Alliance, Contractor or Joint Developer

Contract ID number

Relationship contact name

Relationship contact E-mail

AUS8-2002-0513 Method and apparatus to implement an <IMGDB> tag in HTML - continued

**Relationship contact phone**

**\*Question 8**

Have you, or any of the other inventors, submitted this same invention disclosure or similar invention disclosure previously?

Yes

No

If Yes, please provide disclosure number below:

**\*Question 9**

Are you, or any of the other inventors, aware of any related inventions disclosures submitted by anyone in IBM previously?

Yes

No

If Yes, please provide the docket or disclosure number or any other identifying information below:

**Question 10**

What type of companies do you expect to compete with inventions of this type? Check all that apply.

- Manufacturers of enterprise servers
- Manufacturers of entry servers
- Manufacturers of workstations
- Manufacturers of PC's
- Non-computer manufacturers
- Developers of operating systems
- Developers of networking software
- Developers of application software
- Integrated solution providers
- Service providers
- Other (Please specify below)

**Question 11**

If the invention relates to a product or service that is outside the scope of your business unit, please recommend IBM business unit(s), IBM location(s) or individual(s) within IBM that you think would provide a good evaluation of your invention:

**\*Patent Value Tool (Optional - this may be used by the inventor and attorney to assist with the eval Evaluation**

**Search Information**

**Search Office Information**

**Final Decision**

**Post Disclosure Text & Drawings**

To add additional information related to this disclosure once it has been submitted, click the action button below and a new document will be opened for you to enter the new information. To view existing post disclosure information, double-click on the item in the list below (if there has been additional information entered), and the document will open for you to view.

AUS8-2002-0513 Method and apparatus to implement an <IMG08> tag in HTML - continued

Date entered Post disclosure information (comments and drawings)

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Form Revised 09/01/02